CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

ORDER NO. 96-153 UPDATED WASTE DISCHARGE REQUIREMENTS AND RECISION OF WDR NO. 73-42

PESCADERO SOLID WASTE DISPOSAL SITE, SAN MATEO, SAN MATEO COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board), finds that:

DISCHARGER & SITE IDENTIFICATION

- 1. Pescadero Solid Waste Disposal Site (Pescadero LF) is owned by San Mateo County, the site's legal owner, hereinafter referred to as the discharger. The site is located approximately 1.5 miles from the town of Pescadero and consists of an older portion and a newer portion as shown on Attachment B, which is incorporated herein and made a part of this Order.
- 2. No waste has been disposed of at the site since 1987. The landfill is currently classified as a closed, inactive Class III landfill. The newer portion of the facility was closed in 1987 pursuant to an approved Closure Plan.

PURPOSE OF UPDATE ORDER

3. The primary objectives of this order are to revise the groundwater, surface water and leachate monitoring programs, to evaluate the impact to water quality, and to bring the site into compliance with the appropriate regulations of Articles 5 and 8, Title 23, Division 3, Chapter 15 of the California Code of Regulations.

SITE DESCRIPTION

4. The landfill is a closed, unlined Class III solid waste disposal site located approximately 1 mile from the coastal shoreline, in high topographic terrain along Bean Hollow Road. The landfill occupies an approximately 54 acre parcel owned by San Mateo County. A transfer station is located on site which is maintained by Browning-Ferris Industries presently. Land use within 1,000 feet of the site is agricultural, residential and recreational.

SITE HISTORY

5. The Pescadero LF consists of an older portion and newer portion. The older portion of the Pescadero LF site, located along Pescadero Road began operation in 1962 and was closed in

- 1973. The newer portion of the Pescadero LF site, located along Bean Hollow Road began operation in 1973 and was closed in 1987. The landfill accepted mainly household waste. No wastes were received after 1987.
- 6. The Regional Board on October 12, 1973, adopted Waste Discharge Requirements (WDRs) Order No. 73-42. This Order rescinds Regional Board's Order No. 73-42 in accordance with the California Code of Regulations, Title 23, Chapter 15, Article 5.

WASTES AND THEIR CLASSIFICATION

7. The disposal operation was restricted to household wastes, grass cuttings, tree trimmings, animal wastes, metals, demolition wastes and solid industrial debris.

GEOLOGY

- 8. The surface and subsurface geology of the site has been evaluated based on field mapping, literature review and review of geologic logs from well borings.
- 9. **STRATIGRAPHY** The geologic materials present at the landfill site can be subdivided into three units:
 - surficial materials;
 - terrace deposits;
 - Pigeon Point Formation.

The surfacial materials include the dark brown to black adobe soils which form on the upper surface of the terrace deposits, the thicker colluvial material and the isolated patches of landslide debris. The terrace deposits consist of firm to soft, yellow to red-brown gravel, sand and silt. The deposits range from 2 to 35 feet in thickness and form a continuous covering over the Pigeon Point bedrock materials. The Pigeon Point Formation consists of dark grey to red-brown, pebble to cobble conglomerate, coarse-grained sandstone, siltstone and shale. The Pigeon Point Formation is a low permeability bedrock underlying the site at a depth of approximately 40 feet.

10. **STRUCTURE** - The main geologic structural feature is a synclinal fold with the axial trend parallel to the main canyon. An inactive fault that strikes N58°W and dips 64° SW was mapped in the bedrock formation exposed in the quarry northeast of the subject site.

SURFACE WATER AND GROUNDWATER

- 11. SURFACE WATER During the wet season two surface water locations are reported to be present. One of the locations is a small stream within the subject site which flows along the western fork of the main north trending valley, the second surface water feature is a spring located along Bean Hollow Road approximately 350 feet northeast of the entrance to the new Pescadero LF site. Surface runoff from precipitation drains through the adjacent valley to the north, along the County Road Department property toward the older portion of the Pescadero site and into marshlands at the confluence of Butano and Pescadero Creek. The watershed area west of Artichoke Road drains towards the ocean and the watershed area south of Bean Hollow Road, which borders the subject site, drains to the southeast into Butano Creek.
- 12. GROUNDWATER Groundwater flow beneath the site is to the north and appears to be influenced by topography. The Pigeon Point Formation acts as a barrier to downward movement of groundwater, creating perched water conditions in the overlying terrace deposits and surficial materials. During the raining periods, terrace and surficial materials are completely saturated and therefore discharge water, creating springs and marshy areas. Groundwater flows northward under a hydraulic gradient of 0.04 to 0.06 foot/foot.
- 13. GROUNDWATER DEGRADATION Areas at greater risk for potential groundwater degradation are the terrace deposits and surficial materials.
 - At present a Solid Waste Assessment Test report is not available for this site. Any release from the landfill will be detected from evaluation of the monitoring data obtained in Updated Discharge Monitoring Program.
- 14. BASIN PLAN The Regional Board adopted a revised Water Quality Plan for the San Francisco Bay Basin (Basin Plan) in June 21, 1995 This updated and consolidated plan represents the Board's master water quality control planning document. The revised Basin Plan was approved by the State Water Resource Control Board and the Office of the Adminstrative Law on July 20 and November 13, respectively, of 1995. A summary of regulatory provisions is contained in Title 23 of the California Code of Regulations at Section 3912. The Basin Plan defines beneficial uses and water quality objectives for waters of the State, including surface waters and groundwaters.
- 15. BENEFICIAL USES Beneficial uses of the useable groundwater and the surrounding surface water of the Butano Creek and the Pescadero Creek include:
 - a. Fish habitat;
 - b. Water contact recreation;

- Non-contact water recreation; C.
 - Wildlife habitat; d.
- The present and potential beneficial uses of the deeper groundwater are as follows: e. 16.
 - Domestic and municipal water supply, a.
 - Industrial process water supply, b.
 - Agricultural water supply.

- The newer and older portions of the landfill are unlined, but the newer portion utilizes water DESIGN OF WASTE MANAGEMENT UNIT diversion methods to reduce introduction of water. It has an underdrain on the south boundary of the site to intercept groundwater before it enters the landfill site and peripheral drainage ditches to prevent stormwater runoff from outside of the landfill to enter the landfill of the control of the landfill of the manual of the control of the landfill of the manual of the control of the landfill of the manual of the control of the landfill of the manual of the control of the landfill of the manual of the control of the landfill of the landfill of the landfill of the control of the landfill of th wantage unches to prevent stormwater runon nom outside or the fanomic of leachate site. Clay barriers were installed in the newer portion to reduce the potential of leachate site. Clay barriers were installed in the newer portion of the leaden was desired to be according to the discool site. movement out of the disposal site. The newer portion of the landfill was designed to have an estimated lifetime of approximately 20 years estimated lifetime of approximately 20 years, waste capacity of 430,000 cubic yards and a 17.
 - A 4-foot thick final cover system consists of three discrete layers: an approximately 2-foot thick foundation soil layer immediately overlying the refuse fill, a minimum 1-foot thick of a minimum 1-foot thick of the foundation soil layer immediately overlying the refuse fill, a minimum 1-foot thick of the foundation soil layer immediately overlying the refuse fill, a minimum 1-foot thick of the foundation soil layer immediately overlying the refuse fill, a minimum 1-foot thick of the foundation soil layer immediately overlying the refuse fill, a minimum 1-foot thick of the foundation soil layer immediately overlying the refuse fill, a minimum 1-foot thick of the foundation soil layer immediately overlying the refuse fill, a minimum 1-foot thick of the foundation soil layer immediately overlying the refuse fill, a minimum 1-foot thick of the foundation soil layer immediately overlying the refuse fill, a minimum 1-foot thick of the foundation soil layer immediately overlying the refuse fill the foundation soil layer immediately overlying the refuse fill the foundation soil layer immediately overlying the refuse fill the foundation soil layer immediately overlying the refuse fill the foundation soil layer immediately overlying the refuse fill the foundation soil layer immediately overlying the refuse fill the foundation soil layer immediately overlying the refuse fill the foundation soil layer immediately overlying the refuse fill the foundation of the tnick roundation soil layer immediately overlying the reruse III, a minimum 1-Toot tnick of permeability clay (permeability less than 1×10^{-6} cm/sec) covering the foundation soil, and a permeability clay (permeability less than 1×10^{-6} cm/sec) covering the foundation soil. maximum elevation of 255 feet. foot thick layer of topsoil covering the clay. The cover system has a minimum design slop 18. 3 percent and is covered by vegetation.

For the newer portion of the landfill, the discharger is required to perform semi-annual manifesting and described in the attached Discharge Manifesting Decrees Decrees Against Age Discharge Manifesting Decrees Dec monitoring as described in the attached Discharge Monitoring Program, Parts A & B existing monitoring network which consists of four groundwater monitoring wells (M MONITORING PROGRAM MW2, M1 & M2) and one leachate monitoring sump at the lowest elevation point in 19. landfill.

For the older portion of the landfill the discharger is required to perform only stand observations as described in the attached Discharge Monitoring Program, Part A (S 3. (a),(b), (c)) & Part B (Section A).

- 20. Surface water monitoring is to be conducted as part of the current General Industrial Stormwater Discharge Permit (NPDES) and its approved stormwater monitoring plan.
- 21. The discharger is required to conduct unsaturated zone monitoring, where technically feasible, to satisfy the requirements of Article 5, Section 2550.7.
- 22. The discharger is required to analyze for the monitoring parameters as presented in Table A of the attached Discharge Monitoring Program.

CALIFORNIA ENVIRONMENTAL QUALITY ACT.

- 23. This site is exempted from the provisions of the California Environmental Quality Act (CEQA) pursuant to Section 15308, Title 14 of the California Code of Regulation. However, any subsequent development of the closed landfill may not be exempted from CEQA.
- 24. The Board has notified the discharger and interested agencies and persons of its intent to issue waste discharge requirements for the discharger and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
- 25. The Board, in a public meeting heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that The County of San Mateo, its agents, successors and assigns shall meet the applicable provisions contained in Title 23, Division 3, Chapter 15 of the California Code of Regulations and Division 7 of the California Water Code and shall comply with the following:

A. PROHIBITIONS

- 1. Waste shall not be in contact with ponded water from any source whatsoever.
- 2. No further waste shall be deposited or stored at this site.
- 3. Leachate from waste and ponded water containing leachate or in contact with solid wastes shall not be discharged to waters of the State or of the United States.
- 4. The discharger, or any future owner or operator of the site, shall not cause the following conditions to exist in waters of the State at any place outside the waste management facility:

a. Surface Waters

1. Floating, suspended, or deposited macroscopic particulate matter or foam.

- Bottom deposits or aquatic growths. 2.
- Alteration of temperature, turbidity, or apparent color beyond natural background levels. 3.
 - Visible, floating, suspended or deposited oil or other products of 4.
 - Toxic or other deleterious substances to be present in concentrations or quantities which may cause deleterious effects on aquatic biota, wildlife petroleum origin. or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a 5. result of biological concentrations.
- **b**.

Groundwater shall not be impacted as a result of solid waste degradation. Groundwater

SPECIFICATIONS B.

- All reports pursuant to this order shall be prepared under the supervision of a registered civil engineer, California registered geologist or certified engineering 1. geologist.
 - The site shall be protected from any washout or erosion of wastes or covering materi and from inundation which could occur as a result of a 100 year 24 hour precipitation event, or as the result of flooding with a return frequency of 100 years. 2.
 - Surface drainage from tributary areas and internal site drainage from surface or subsurface sources shall not contact or percolate through wastes during the life of 3. site.
 - The existing leachate control facility, (clay barrier structures (LCRS)) shall be maintained as long as leachate is present and poses a threat to water quality. 4.
 - The discharger shall assure that the foundation of the site, the solid waste fill, as structures which control leachate, surface drainage, erosion and gas are constru and maintained to withstand conditions generated during the maximum probab 5. earthquake.
 - The facility's Leachate Collection and Removal System (LCRS) must be capa creating an inward leachate gradient which shall prevent leachate migration (6.

The LCRS shall be inspected monthly or more frequently as necessary and any PESCADERO SOLID WASTE DISPOSAL SITE ORDER NO. 96-153

- The exterior surfaces (cap) shall be maintained to promote lateral runoff of accumulated fluid shall be removed.
- The discharger shall analyze the samples from the existing groundwater wells (MWI, precipitation and to ensure that ponding does not occur. 7.
 - MW2, M1 & M2) on a semi-annual basis for parameters listed in Table A of the Discharge Monitoring Program. 8.
 - In the event of a release of a constituent of concern beyond the Point of Compliance, the site begins a Compliance Period (Sect. 2550.6(a)). During the Compliance the discharger shall perform an Assessment Monitoring Brown and a Compliance the discharger shall perform an Assessment Monitoring Brown and a Compliance the discharger shall perform an Assessment Monitoring Brown and a Compliance the discharger shall perform an Assessment Monitoring Brown and a Compliance the discharger shall perform an Assessment Monitoring Brown and a Compliance the discharger shall perform an Assessment Monitoring Brown and a Compliance the discharger shall perform an Assessment Monitoring Brown and a Compliance the discharger shall perform an Assessment Monitoring Brown and a Compliance the discharger shall perform an Assessment Monitoring Brown and a Compliance the discharger shall perform an Assessment Monitoring Brown and a Compliance the discharger shall perform an Assessment Monitoring Brown and a Compliance the discharger shall perform an Assessment Monitoring Brown and a Compliance the discharger shall perform an Assessment Monitoring Brown and a Compliance the discharger shall perform an Assessment Monitoring Brown and a Compliance the discharger shall perform an Assessment Monitoring Brown and a Compliance the discharger shall perform an Assessment Monitoring Brown and a Compliance the discharger shall perform an Assessment Monitoring Brown and a Compliance the discharger shall perform an Assessment Monitoring Brown and a Compliance the discharger shall perform an Assessment Monitoring Brown and a Compliance the discharger shall perform an Assessment Monitoring Brown and a Compliance the discharger shall perform an Assessment and a Compliance the discharger shall perform an Assessment and a Compliance the discharger shall perform an Assessment and a Compliance the discharger shall perform an Assessment and a Compliance the discharger shall perform an Assessment and a Compliance the discharger shall perform an Assessment and a Compliance the discharger shall perform a complex and a Compliance the discharge the discharger shall perform an Assessment Monitoring Program and a Corrective 9. Action Program.
 - The discharger shall install any reasonable additional groundwater and leachate monitoring devices required to fulfill the terms of any Discharge Monitoring Program issued by the Executive Officer. 10.
 - Landfill gases shall be adequately vented, removed from the landfill, or otherwise Controlled to minimize the danger of explosion, adverse health effects, nuisance conditions, or the impairment of beneficial uses of water due to migration through the windows (supplemental) 11. vadose (unsaturated) zone.
 - The discharger shall maintain all devices or designed features, installed in accordance in the discharger shall maintain all devices or designed features, installed in accordance in the discharger shall maintain all devices or designed features, installed in accordance in the discharger shall maintain all devices or designed features, installed in accordance in the discharger shall maintain all devices or designed features, installed in accordance in the discharger shall maintain all devices or designed features. with this order such that they continue to operate as intended without interruption provided for by the performance standards adopted by the California Integrated Management Board 12. Management Board.
 - The discharger shall provide a minimum of two surveyed permanent monument the landfill from which the location and elevation of wastes; containment structural manifesian facilities can be determined the containment of the location and elevation of wastes; and monitoring facilities can be determined throughout the operation and post maintenance period. These monuments shall be installed by a licensed land su 13. registered civil engineer.
 - The Regional Board shall be notified immediately of any failure occurring in management unit. Any failure which threatens the integrity of containment the landfill shall be promptly corrected after approval of the method and services of the method and s 14.
 - The discharger shall comply with all applicable provisions of Chapter 15 the Executive Officer. specifically referred to in this Order. 15. 7

The discharger shall maintain the facility so as to prevent a statistically significant increase in water quality parameters at points of compliance as provided in Section 16. 2550.5.

PROVISIONS C.

- The discharger shall comply with all Prohibitions, Specifications and Provisions of this 1. Order.
 - The discharger shall submit semi-annual monitoring reports by April 30 for the winter/spring reporting period and October 30 for the summer/fall reporting period of each year in accordance with the attached Updated Discharge Monitoring Program. Sample collection shall be between a six months interval. By April 30 of each year the discharger shall also submit an annual report to the Board covering the previous calendar year as described in Part A of the Updated Discharge Monitoring Program. 2. OCTOBER 30 OF EACH YEAR. ANNUAL Report may be combined with semi-

REPORT DUE DATE:

annual report due APRIL 30 OF EACH YEAR

The discharger shall submit appropriate detailed maps showing the following: 3.

location of leachate and groundwater monitoring wells location of landfill in relation to facility i.

topographic contours on a scale of 1 to 500 feet ii.

iii. iv.

REPORT DUE DATE: 3 MONTHS AFTER ADOPTION OF THIS ORDER The discharger shall submit gas monitoring results on a yearly basis.

The discharger shall submit a detailed Post Earthquake Inspection and Corrective Action Plan acceptable to the Executive officer to be implemented in the event REPORT DUE DATE: earthquake generating ground shaking of Richter Magnitude 7 or greater at or 30 miles of the landfill. The report shall describe the containment features, and groundwater monitoring and leachate control facilities potentially impacted by static and seismic deformations of the landfill. The plan shall provide for repo 4. results of the post earthquake inspection to the Board within 72 hours of the occurrence of the earthquake. Immediately after an earthquake event causin to the landfill structures, the corrective action plan shall be implemented an Board shall be notified of any damage. The report shall be due within

three months of adoption of this Order.

REPORT DUE DATE: 3 MONTHS AFTER ADOPTION OF THIS ORDER

- 5. All reports pursuant to these Provisions shall be prepared under the supervision of a registered civil engineer or certified engineering geologist.
- 6. The discharger shall submit a Contingency Plan to be instituted in the event of a surface leak or spill from the leachate facilities. The discharger shall give immediate notification to the San Francisco Bay Regional Water Quality Control Board, the Local Enforcement Agency (LEA), and the California Department of Toxic Substances Control. The discharger shall initiate its contingency action plan to stop and contain the migration of pollutants to receiving waters. The report shall be due within three months of adoption of this Order.

REPORT DUE DATE: 3 MONTHS AFTER ADOPTION OF THIS ORDER

- 7. The discharger shall file with the Regional Board Discharge Monitoring Reports performed according to any Discharge Monitoring Program issued by the Executive Officer.
- 8. The discharger shall immediately notify the Board of any flooding, equipment failure, slope failure, or other change in site conditions which could impair the integrity of waste or leachate containment facilities or precipitation and drainage control structures.

REPORT DUE DATE: IMMEDIATE

- 9. The discharger shall maintain a copy of this Order at the site so as to be available at all times to site operating personnel.
- 10. This Board considers the property owner and site operator to have continuing responsibility for correcting any problems which arise in the future as a result of the waste discharged or related operations.
- 11. The discharger shall permit the Regional Board or its authorized representative, upon presentation of credentials:
 - a. Immediate entry upon the premises on which wastes are located or in which any required records are kept.
 - b. Access to copy any records required to be kept under the terms and conditions of this order.
 - c. Inspection of any treatment equipment, monitoring equipment, or monitoring

methods required by this order or by any other California State Agency.

- d. Sampling of any discharge or groundwater governed by this order.
- 12. These requirements do not authorize commission of any act causing injury to the property of another or of the public; do not convey any property rights; do not remove liability under federal, state or local laws; and do not authorize the discharge of wastes.
- In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the discharger, the discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to this office. To assume operation of this Order, the succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of the Order. (Refer to Standard Provisions, referenced above). The request must contain the requesting entity's full legal name, the address and telephone number of the persons responsible for contact with the Board and statement. The statement shall comply with the signatory paragraph described in Standard Provisions and state that the new owner or operator assumes full responsibility for this Order. Failure to submit the request shall be considered a discharge without requirements, a violation of the California Water Code.
- 14. This Order is subject to Board review and updating, as necessary, to comply with changing State and Federal laws, regulations, policies, or guidelines; changes in the Board's Basin Plan; or changes in the discharge characteristics.

I, Loretta K. Barsamian, Executive Officer, do hereby certify that the foregoing is a full, complete, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on November 20, 1996.

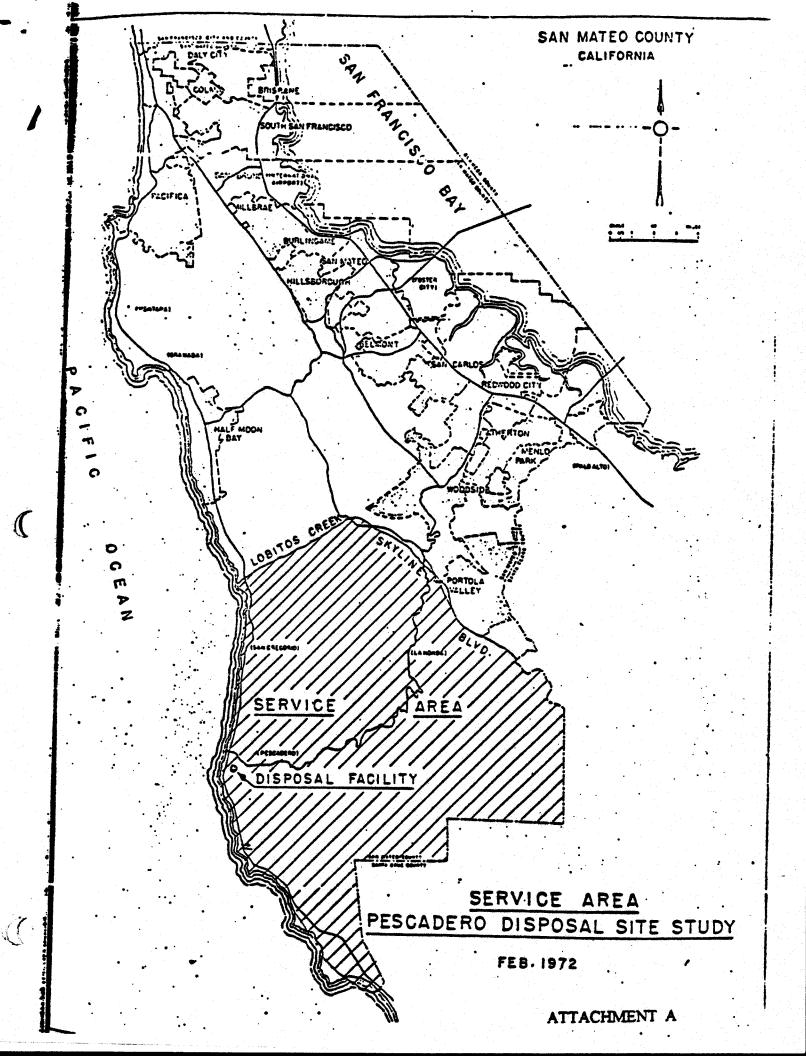
Loretta K. Barsamian

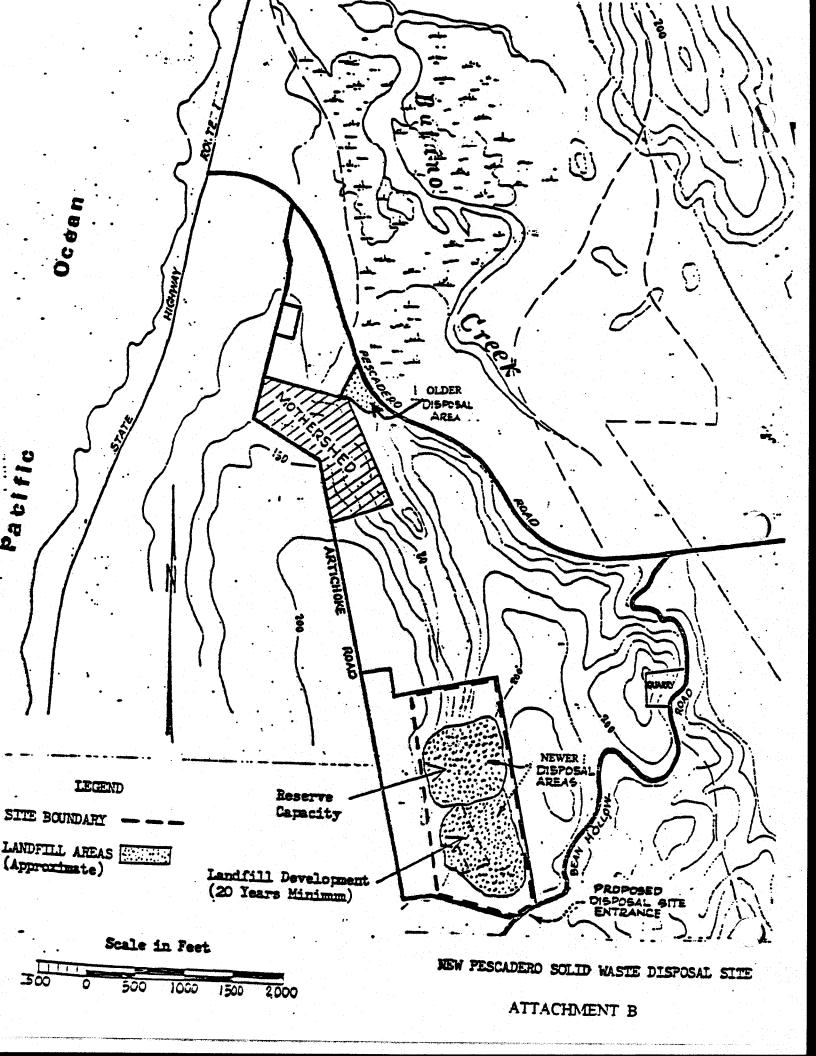
Executive Officer

Attachments: A. Site Location Map

B. Facility Map

C. Discharge Monitoring Program





CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

UPDATED DISCHARGE MONITORING PROGRAM

FOR

PESCADERO SOLID WASTE DISPOSAL SITE. CLASS III SOLID WASTE DISPOSAL SITE SAN MATEO, SAN MATEO COUNTY

ORDER NO. 96-153

CONSISTS OF

PART A

AND

PART B

A. GENERAL

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No.73-16. This Discharge Monitoring Program is issued in accordance with Chapter 15, Article 5.

The principal purposes of a discharge monitoring program are: (1) to document compliance with waste discharge requirements and prohibitions established by the Board, (2) to facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge, (3) to develop or assist in the development of standards of performance, and toxicity standards, (4) to assist the discharger in complying with the requirements of Article 5, Chapter 15 as revised July 1, 1991.

B. SAMPLING AND ANALYTICAL METHODS

Sample collection, storage, and analyses shall be performed according to the most recent version of EPA Standard Methods and in accordance with an approved sampling and analysis plan.

Water and waste analysis shall be performed by a laboratory approved for these analyses by the State of California. The director of the laboratory whose name appears on the certification shall supervise all analytical work in his/her laboratory and shall sign all reports of such work submitted to the Regional Board.

All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

C. DEFINITION OF TERMS

- 1. A grab sample is a discrete sample collected at any time.
- Receiving waters refers to any surface water which actually or potentially receives surface or groundwaters which pass over, through, or under waste materials or contaminated soils. In this case the groundwater beneath and adjacent to the landfill areas, the surface runoff from the site, Spring Branch are considered receiving waters.
- 3. Standard observations refer to:
- a. Receiving Waters

- 1) Floating and suspended materials of waste origin: presence or absence, source, and size of affected area.
- 2) Discoloration and turbidity: description of color, source, and size of affected area.
- 3) Evidence of odors, presence or absence, characterization, source, and distance of travel from source.
- 4) Evidence of beneficial use: presence of water associated wildlife.
- 5) Flow rate.
- Weather conditions: wind direction and estimated velocity, total precipitation during the previous five days and on the day of observation.
- b. Perimeter of the waste management unit.
 - 1) Evidence of liquid leaving or entering the waste management unit, estimated size of affected area and flow rate. (Show affected area on map)
 - 2) Evidence of odors, presence or absence, characterization, source, and distance of travel from source.
 - 3) Evidence of erosion and/or daylighted refuse.
- c. The waste management unit.
 - 1) Evidence of ponded water at any point on the waste management facility.
 - 2) Evidence of odors, presence or absence, characterization, source, and distance of travel from source.
 - 3) Evidence of erosion and/or daylighted refuse.
 - 4) Standard Analysis (SA) and measurements are listed on Table A (attached)

D. SAMPLING, ANALYSIS, AND OBSERVATIONS

The discharger is required to perform sampling, analyses, and observations in the following media:

- 1. Groundwater per Section 2550.7(b) and
- 2. Surface water per Section 2550.7(c)

and per the general requirements specified in Section 2550.7(e) of Article 5, Chapter 15. The Regional Board is requiring semi-annual sampling for this Discharge Monitoring Program.

E. RECORDS TO BE MAINTAINED

Written reports shall be maintained by the discharger or laboratory, and shall be retained for a minimum of five years. This period of retention shall be extended during the course

of any unresolved litigation regarding this discharge or when requested by the Board. Such records shall show the following for each sample:

- 1. Identity of sample and sample station number.
- 2. Date and time of sampling.
- 3. Date and time that analyses are started and completed, and name of the personnel performing the analyses.
- 4. Complete procedure used, including method of preserving the sample, and the identity and volumes of reagents used.
- 5. Calculation of results.
- 6. Results of analyses, and detection limits for each analysis.

F. REPORTS TO BE FILED WITH THE BOARD

1. Written detection monitoring reports shall be filed by the 15th day of the month following the report period. In addition an annual report shall be filed as indicated in F.3 below. The reports shall be comprised of the following:

a. Letter of Transmittal

A letter transmitting the essential points in each report should accompany each report. Such a letter shall include a discussion of any requirement violations found during the last report period, and actions taken or planned for correcting the violations. If the discharger has previously submitted a detailed time schedule for correcting requirement violations, a reference to the correspondence transmitting such schedule will be satisfactory. If no violations have occurred in the last report period this shall be stated in the letter of transmittal. Monitoring reports and the letter transmitting the monitoring reports shall be signed by a principal executive officer at the level of vice president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates. The letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true, complete, and correct.

- b. Each monitoring report shall include a compliance evaluation summary. The summary shall contain:
- 1) A graphic description of the velocity and direction of groundwater flow under/around the waste management unit, based upon the past and present water level elevations and pertinent visual observations.

- The method and time of water level measurement, the type of pump used for purging, pump placement in the well; method of purging, pumping rate, equipment and methods used to monitor field pH, temperature, and conductivity during purging, calibration of the field equipment, results of the pH, temperature conductivity and turbidity testing, well recovery time, and method of disposing of the purge water.
- Type of pump used, pump placement for sampling, a detailed description of the sampling procedure; number and description of equipment, field and travel blanks; number and description of duplicate samples; type of sample containers and preservatives used, the date and time of sampling, the name and qualifications of the person actually taking the samples, and any other observations.
- c. A map or aerial photograph shall accompany each report showing observation and monitoring station locations.
- d. Laboratory statements of results of analyses specified in Part B must be included in each report. The director of the laboratory whose name appears on the laboratory certification shall supervise all analytical work in his/her laboratory and shall sign all reports of such work submitted to the Board.
- The methods of analyses and detection limits must be appropriate for the expected concentrations. Specific methods of analyses must be identified. If methods other than EPA approved methods or Standard Methods are used, the exact methodology must be submitted for review and approved by the Executive Officer prior to use.
- In addition to the results of the analyses, laboratory quality assurance/quality control (QA/QC) information must be included in the monitoring report. The laboratory QA/QC information should include the method, equipment and analytical detection limits; the recovery rates; an explanation for any recovery rate that is less than 80%; the results of equipment and method blanks; the results of spiked and surrogate samples; the frequency of quality control analysis; and the name and qualifications of the person(s) performing the analyses.
- e. An evaluation of the effectiveness of the leachate monitoring or control facilities, which includes an evaluation of leachate buildup within the disposal units, a summary of leachate volumes removed from the units, and a discussion of the leachate disposal methods utilized.
- f. A summary and certification of completion of all standard observations for the waste management unit, the perimeter of the waste management unit, and the receiving waters.

2. CONTINGENCY REPORTING

- a. A report shall be made by telephone of any seepage from the disposal area immediately after it is discovered. A written report shall be filed with the Board within five days thereafter. This report shall contain the following information:
 - 1) a map showing the location(s) of discharge;
 - 2) approximate flow rate;
 - 3) nature of effects; i.e. all pertinent observations and analyses; and
 - 4) corrective measures underway or proposed.
- b. A report shall be made in writing to the Board within seven days of determining that a statistically significant difference occurred between a down gradient sample and California and Federal Drinking Water Standards (Maximum Contaminant Levels, MCLs). Notification shall indicate what MCLs has/have been exceeded. The discharger shall immediately resample at the compliance point where this difference has been found and re-analyze.
- c. If resampling and analysis confirms the earlier finding of a statistically significant difference between monitoring results and MCLs the discharger must submit to the Board an amended Report of Waste Discharge as specified in Section 2550.8(k)(5) for establishment of an Evaluation Monitoring Program (EMP) meeting the requirements of Section 2550.9 of Chapter 15.
- d. Within 180 days of determining statistically significant evidence of a release, submit to the regional board an engineering feasibility study for a Corrective Action Program (CAP) necessary to meet the requirements of Section 2550.10. At a minimum, the feasibility study shall contain a detailed description of the corrective action measures that could be taken to achieve background concentrations for all constituents of concern.

3. REPORTING

By April 30 of each year the discharger shall submit an annual report to the Board covering the previous calendar year. The annual report may incorporate the second semi-annual report of the previous year. The annual report shall contain:

- a. Tabular and graphical summaries of the monitoring data obtained during the previous year; the report should be accompanied by a 5¹/₄" computer data disk, MS-DOS ASCII format, tabulating the year's data.
- b. A comprehensive discussion of the compliance record, and the corrective actions taken or planned which may be needed to bring the discharger into full compliance

with the waste discharge requirements.

- c. A map showing the area, if any, in which filling has been completed during the previous calendar year.
- d. A written summary of the groundwater analyses indicating any change in the quality of the groundwater.
- e. An evaluation of the effectiveness of the leachate monitoring/control facilities, which includes an evaluation of leachate buildup within the disposal units, a summary of leachate volumes removed from the units, and a discussion of the leachate disposal methods utilized.

4. <u>WELL LOGS</u>

A boring log and a monitoring well construction log shall be submitted for each new sampling well established for this monitoring program, as well as a report of inspection or certification that each well has been constructed in accordance with the construction standards of the Department of Water Resources. These shall be submitted within 30 days after well installation.

Part B

DESCRIPTION OF OBSERVATION STATIONS AND SCHEDULE OF 1.

TO CRIPTION	OF OBSERVATION OF OBS	·	FREQUENCY
DESCRIPTION OBSERVATION	<u>NS</u> <u>RVATIONS</u> - Report Semi-8 DESCRIPTION	innual OBSERVATIONS	Monthly
A. ON-SITE OBSE STATION V-1 thru V-'n'	Located on the waste disposal area as deli- neated by a 500 foot grid	Standard observations for the waste management unit.	Monthly
P-1 thru P-`n'	network. Located at equidistant intervals not exceeding 1000	Standard observations for the perimeter	
(per- imeter)	feet around a perimeter of the waste management unit.	Standard test	
L-1 th L-'n'	a map indicating	: 16 ti() (V *)	n from seeps ates exceeding
	locations of discharge(s)	5 gpm.	IONITORING - Report Semi-
		SURFACE WILL	. A on

GROUNDWATER and SURFACE WATER MONITORING - Report Semi-B.

Groundwater and surface water shall be monitored as outlined below and on T annual A (Attached).



Monitoring Points:

Withit ing 1 tints.					
Surface Water	SW2, SW1				
Groundwater	MW1,MW2,M1, M2				
Debris zone(Leachate)	L1				

C. FACILITIES MONITORING

The Discharger shall inspect all facilities to ensure proper and safe operation once per quarter and report semi-annually. The facilities to be monitored shall include, but not be limited to:

- a. Perimeter diversion channels
- b. Leachate Management facilities and secondary containment.

I, Loretta K. Barsamian, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

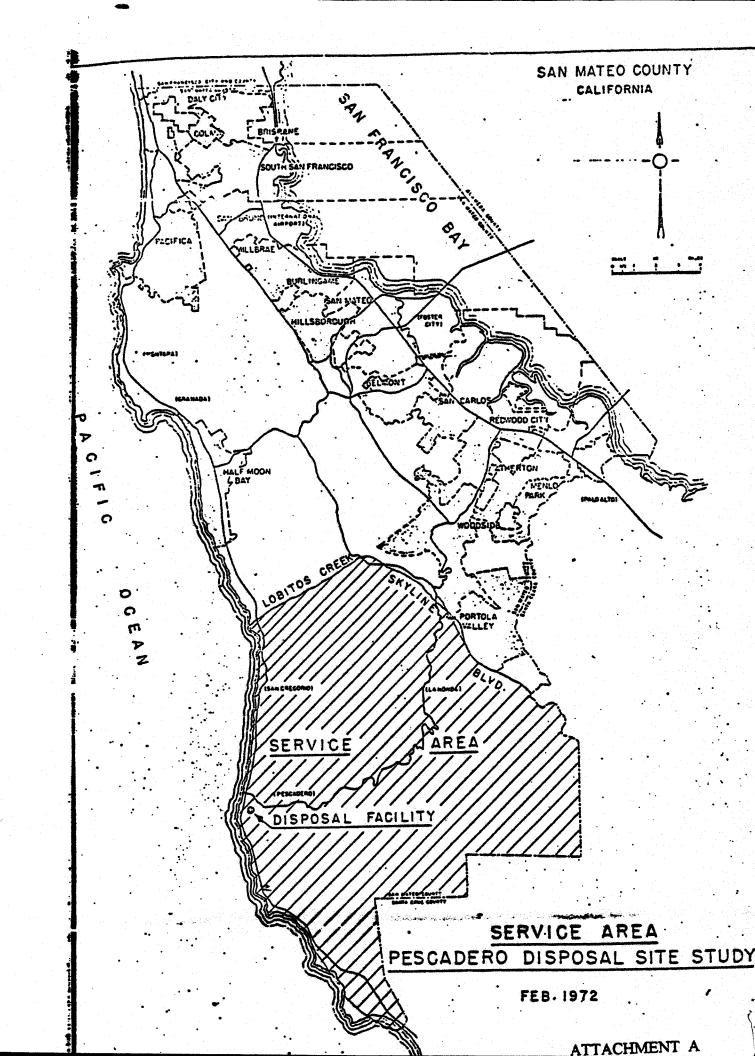
- 1. Has been developed in accordance with the procedures set forth in this Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in this Board's Order No. 96 153.
- 2. Is effective on the date shown below.

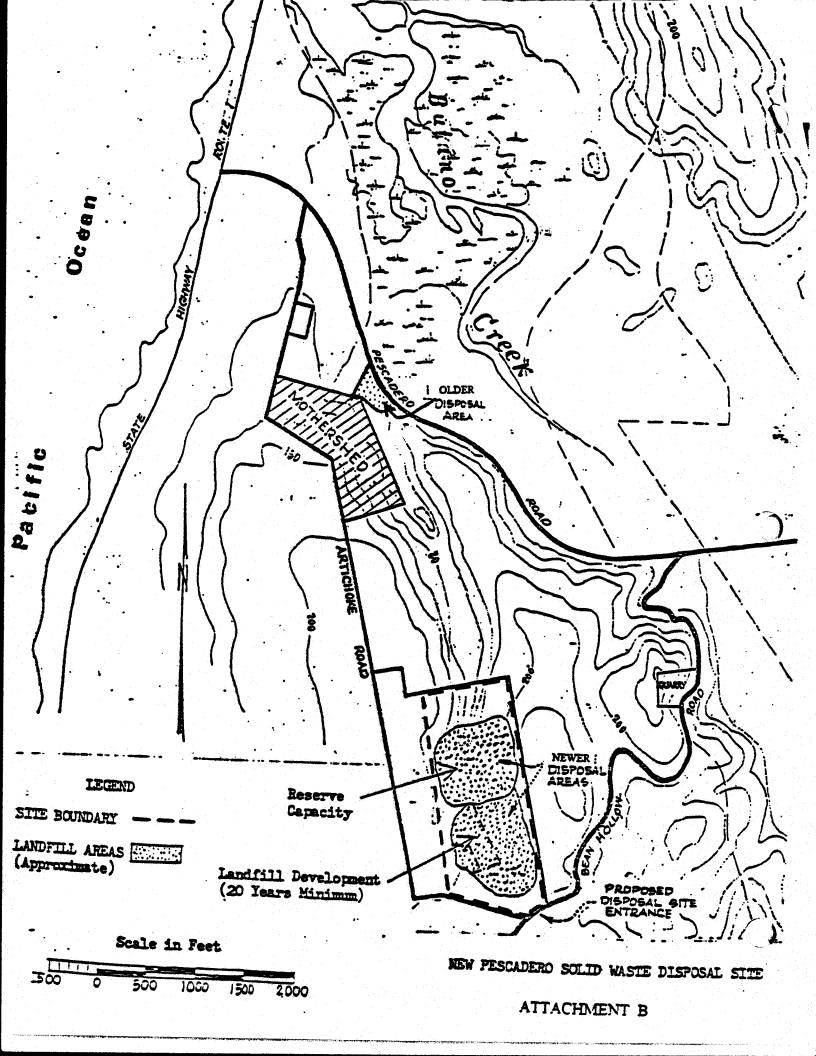
3. May be reviewed or modified at any time subsequent to the effective date, upon written notice from the Executive Officer.

Loretta K. Barsamian Executive Officer

Date Ordered: November 20, 1996 Attachment: Figure A - Site Map

Table A - Schedule for Sampling, Measurement, and Analysis





PESCADERO SOLID WASTE DISPOSAL SITE ORDER 96-153 WASTE DISCHARGE REQUIREMENTS

Table A - Discharge Monnitoring Plan, List of Analytical Parameters

Tuest of Discharge Wollintoring Flair, List of Ar	I aranieu		
Parameters	Method	Frequency	Reference
Water level measurements	Field	Semi-annual	1
Temperature	Field	Semi-annual	1
Alkalinity, bicarbonate(d)	310.1	Semi-annual	2
Sulfate(c)	300.1	Semi-annual	2
Chemical oxygen demand	410.2	Semi-annual	2
Total nitrogen(the sum of Nitrate Nitrogen and Kjeldahl Nitrogen) (d)(c)	351.2	Semi-annual	3
Total organic carbon	415.1	Semi-annual	2
Total dissolved solids	160.2	Semi-annual	2
Electrical conductivity	9050	Semi-annual	3
Volatile Organic Compounds (Appendix I&II)	8260	Once in 5yr(b)(d)	3
Semi-volatile Organic Compounds (Appendix II)	8270	Once in 5yr(b)(d)	3
Arsenic	7060	Semi-annual	3
Barium (b,c)	6010	Semi-annual	3
Cobalt (b)	6010	Semi-annual	3
Cadmium	6010	Semi-annual	3
Chromium	6010	Semi-annual	3
Copper	6010	Semi-annual	3
Lead	6010	Semi-annual(d)	3
Selenium	7740	Semi-annual	3
Iron	6010	Semi-annual	3
pН	9040	Semi-annual	3

^{1.} Not Applicable

Frequency and Sample Type:

^{2.} Methods for Chemical Analysis of Water and Wastes, EPA600/4/79/029, revised March 1983.

^{3.}EPA SW-846

⁽b) groundwater samples only(c) surface water samples only

⁽d) constituents of concern